Casper, J. 2003, Two New *Pinguicula* Species (Lentibulariaceae) From East Cuba (Cuba Oriental). Haussknechtia 9: 141-155.

Pinguicula jaraguana is related to *P. albida* but differs by having oblong to spathulate leaves, subequal corolla lobes that are longer than half of the rest of the corolla, shorter corolla tube, and a thick, saccate spur. *Pinguicula infundibuliformis* is related to the variable *P. benedicta* but differs by its smaller size (up to 8 cm), infundibulate corolla tube almost lacking a distinct spur, and suborbicular leaves. (JS)

Clarke, C., Davis, T., & Tamin, R. 2003, *Nepenthes izumiae* (Nepenthaceae): A New Species from Sumatra. Blumea 48: 179-182.

Nepenthes izumiae combines different features of related species (appendage under lid like in *N. ovata*, cylindrical upper pitchers like *N. singalana*, broad spathulate leaf shape and epiphytic habit like *N. bongso* and *N. ovata*), but it does apparently not co-occur with any of these. The same plant has been treated as "species B" in C. Clarke's book "*Nepenthes* of Sumatra & Peninsular Malaysia" (reviewed in Carniv. Pl. Newslett. 31, 2001). (JS)

Conran, J.G., Lowrie, A. & Moyle-Croft, J. 2002, A revision of *Byblis* (Byblidaceae) in South-Western Australia. Nuytsia 15: 11-19.

Byblis lamellata is described as a new species closely related to *B. gigantea* but distinguished by its seeds that have less corrugated longitudinal ribs and by the fact that the plants may resprout from the stems (not only from the rhizomes) after fire. The two species apparently inhabit disjunct ranges in southwest Australia (*B. gigantea* being restricted to the environs of Perth, while *B. lamellata* grows further N, from Eneabba to Green Head). (JS)

Debbert, P. 2002, Einige neue *Drosera*-Arten aus Südafrika (Droseraceae). Linzer biol. Beitr. 34: 793-800. (in German)

Several plants from South Africa are described as new *Drosera* species. *Drosera afra* is related to *D. trinervia* and said to differ by more pronounced petioles and violet petals (both features known from *D. trinervia* as well). *Drosera coccipetala* is said to differ from *D. pauciflora* by its shorter scapes and intensely red flowers, but no differences to similar forms of *D. cistiflora* are mentioned. *Drosera liniflora* is said to differ from *D. cistiflora* by white styles and smaller ovaries. *Drosera longiscapa* is said to differ from *D. collinsiae* by elongated stems and longer scapes, but no differences to similar forms of *D. madagascariensis* (or *D. nidiformis*) are mentioned. *Drosera rubrifolia* (a possible hybrid but not treated as such in the paper) differs from *D. aliciae* by distinct petioles and only basally divided styles. *Drosera variegata* is said to differ from *D. cistiflora* by stems that are leafless in the upper two thirds (a feature known in *D. cistiflora* as well). (JS)

dos Santos Silva, T.R., & Correa A., M.D. 2002, *Drosera peruensis* (Droseraceae), a New Species from Peru. Novon 12: 543-545.

Drosera peruensis is apparently related to *D. chrysolepis* and *D. camporupestris* but is distinguished from both by its obtuse leaf tips. The other features stated to be characteristic for *D. peruensis* (presence of elongated stems, leaves patent when old, distinct petioles covered by eglandular hairs, scape covered by eglandular hairs) appear to occur in *D. chrysolepis* as well. *Drosera chrysolepis* is allegedly the only other Peruvian species of *Drosera*. There is, however,

a record of *D. montana* (Gentry & Nunez 69485, MO) mentioned in Brako, L. & Zarucchi, J.L., "Catalogue of the Flowering Plants and Gymnosperms of Peru" (Missouri Bot. Garden 1993, p. 412). (JS)

Jobson, R.W., Playford, J., Cameron, K.M. & Albert, V. 2003. Moleeular Phylogenies of Lentibulariaceae Inferred from Plastid rps16 Intron and trnL-F DNA Sequences: Implications for Character Evolution and Biogeography. Syst. Bot. 28: 157-171.

Gene sequence homology comparisons confirmed the monophyly of Lentibulariaceae and of its three constituent genera *Pinguicula*, *Genlisea*, and *Utricularia*. Like in all previous studies, the closest non-carnivorous relative of Lentibulariaceae remains obseure. The morphologically established subgenera and sections of *Pinguicula* are not confirmed but the low number of taxa studied (twelve) does not allow any definitive statements. Two clades within *Genlisea* are coextensive with the two subgenera, *Tayloria* and *Genlisea*, as far as the limited sample (only five species studies) allows any judgment. The seetions proposed in *Utricularia* (Taylor, P., The Genus *Utricularia*, Kew, 1989) are likewise eonfirmed as monophyletie.

According to the phylogenetical hypothesis formulated in this paper and its predecessor (Cladistics 18:127-136, 2002), sections *Polypompholyx* and *Pleiochasia* are sister groups of each other, and the two form a clade sister to all remaining taxa in the genus *Utricularia*. This prompts an explanation of the origin of the genus involving long distance dispersal from the primary center of diversity of Lentibulariaceae (tropical America) to Australia (where neither *Pinguicula* nor *Genlisea* are known to occur). A basal position of *Polypompholyx* + *Pleiochasia* within *Utricularia* in turn would necessitate opposite long distance dispersal events in the immediate next steps of the evolution of the genus, because in both major clades of the remainder of the genus predominantly American sections (viz. *Aranella* and *Psyllospermal/Foliosal/Orchidioides/ Iperua*, respectively) are basal. Furthermore, the close morphological similarity between *Pleiochasia* and the likewise Australian section *Australes* is not reflected in this hypothesis.

The other systematic inferences in the paper are less controversial. *Utricularia olivacea*, classified as a member of sect. *Utricularia* by Taylor, appears to belong to a separate lineage more closely related to sect. *Vesiculina*. (JS)

Kurata, S. 2003, A New Philippine Pitcher Plant (*Nepenthes saranganiensis*), the Third Species Having a Saddle-Shaped Stem. J. Insectiv. Pl. Soc. (Japan) 54(2): 41-44; figs. on front and back covers of the same issue.

Nepenthes saranganiensis (of which no flowers are known to date) differs from its supposed closest relative, *N. alata*, by saddle-shaped leaf bases (decurrent with margins joining at the side of the stem where the leaf is attached). This feature (of perhaps debatable taxonomic significance) is likewise used to separate *N. ephippiata* from *N. lowii* and *N. northiana* from *N. mapuluensis*. (JS)

Lowrie, A. 2002, *Utricularia petertaylorii* (Lentibulariaceae), a New Species from the South-West of Western Australia. Nuytsia 14: 405-410.

Utricularia petertaylorii differs from its relatives *U. inaequalis* by leaves with rounded tips and from *U. violacea* by the entire (not lobed) corolla lower lip. (JS)

Lowrie, A. 2002, *Drosera pedicellaris* (Droseraceae), a New Species from South-West Western Australia. Nuytsia 15: 59-62.

Drosera pedicellaris is related to *D. parvula* but differs by its stipule bud that lacks a point, by more numerous bracts, longer pedicels, and lacking red petal marks. (JS)

Rivadavia F., Kondo, K., Kato, M. & Hasebe, M. 2003. Phylogeny of the Sundews,. *Drosera* (Droseraceae), Based on Chloroplast rbcL and Nuclear 18S Ribosomal DNA Sequences. Am. J. Bot. 90:123-130.

This is the first comprehensive genetic study to address phylogenetic relationships within the genus *Drosera*. It confirms monophyly of the genus (except for *D. regia*, which appears more closely related to *Aldrovanda* in the tree based on rbcL homology) and of most lineages based on morphological similarity. *Drosera arcturi* (subgenus *Arcturia*) is sister to the remaining genus, which is essentially split into two large clades, one including most of the Australian taxa, and the second comprising subgenera *Thelocalyx* (*D. burmannii* and *D. sessilifolia*) and *Drosera* (containing most species outside Australia). In the Australian clade, *D. glanduligera* (subgenus *Coelophylla*) is sister to the remaining species, which belong to two clades, one containing subgenera *Lasiocephala* (relatives of *D. petiolaris*) and *Bryastrum* (pygmy sundews), the other containing subgenera *Phycopsis* (*D. binata*) and *Ergaleium* (cormous sundews).

Drosera hamiltonii, formerly (CPN 25:67-88, 1996) classified as a separate subgenus (*Stelogyne*), appears as a sister to *D. indica* (subgen. *Drosera* sect. *Arachnopus*). *Drosera stenopetala*, formerly classified as a member of subgen. *Arcturia*, is more closely related to *D. uniflora* (subgen. *Drosera*). Within subgenus *Drosera* several clades are apparent that also share geographical distribution patterns. There are apparently two separate clades that occur in South America. The first (relatives of *D. capillaris*) has affinities to North American, Eurasian, and neocaledonian species, and most of its representatives (except *D. hirtella*) are known from northern South America (Guayana Highland). The second (relatives of *D. montana*, most of which are endemic to Brazil) is more closely related to African species.

A very weak point in the discussion is the statement that "Droseraceae are located close to the tip of the angiosperm phylogenetic tree", which is not supported by data except fallible molecular clock estimations. Conversely, fossil evidence (*Aldrovanda* seeds from Cretaceous deposits; CPN 26:93-98, 1997) proves Droseraceae to be a comparatively old family. The wrong assumption of a young age of the family results in untenable long distance dispersal speculations.

Several systematically interesting species (*D. spatulata*, *D. intermedia*, *D. communis*, all subgen. *Drosera*, and especially the somewhat enigmatic *D. meristocaulis*, the only representative of subgen. *Meristocaulis*) have not been studied in the present analysis. They should be included in future studies. (JS)

Zamudio, S. & van Marm, J. 2003. *Pinguicula conzattii* (Lentibulariaceae), una especie nueva del estado de Oaxaca, Mexico. Acta Bot. Mex. 62: 15-21.

Pinguicula conzattii from the "Santiago Nuyoo Pass" is related and similar to *P. mirandae*, from which it differs by more numerous leaves (70-100 instead of 30-60) that are glandular on both surfaces (instead of adaxial surface only) in the winter rosette, less numerous leaves (4-6 instead of 6-10) with a distinct (instead of indistinct) petiole in the summer rosette, and larger flowers (18-30 mm instead of 9-17 mm) with a straight (instead of strongly bent) corolla tube. Additionally, no stolons are known from *P. conzattii*. (JS)

Looking Back: CPN 25 years ago

Bill Scholl's technique for leaf cutting propagation of *Sarracenia* was described: "He removes smaller, immature leaves of *S. purpurea*, including the clasping petiole, from the parent plant and dips the petiole end in Rootone. This is then potted in sphagnum and roots begin to appear in 3-4 weeks. As we would anticipate, peeling off the clasping petiolar base and juvenility seem to be key factors."